

Date: Thursday, 30/04/2009 9:07:15 AM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	02.750 SUPPORT
Job Number :	47637		
Estimate Number :	10829		
P.O. Number :		Part Number :	D28931
This Issue :	30/04/2009	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D2893 REV B
First Issue :	//	Project Number :	N/A
Previous Run :	47109	Drawing Revision :	B
Written By :		Material :	
Checked & Approved By :	JLD 09.04.30	Due Date :	07/05/2009
Comment :	Est: C 02.11.26 Reformat; Added P/O KJ est D 06.04.19 removed alodine EC Est Rev:E Added priming as per Rev B 07-04-30 JLM est F 08.03.19 Re-format EC verified by: DD Est Rev:G 08-05-15 add QC14 DD verified by:EC		
		Qty:	20 Um: Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DSK078	D2893-1 TURNING DETAIL
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Comment: Qty.: 0.5000 Each(s)/Unit Total: 10.0000 Each(s)

D2893-1 TURNING DETAIL

Batch: 847481

09/05/13

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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**Comment:** HAAS 1

Machine as per Folio FA081

Tumble & Deburr

09/05/13
09/05/16
09/05/17

DTP 09/05/14

(20)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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**Comment:** INSPECT ALL DIM TO DIM SHEET09/05/17
DTP 09/05/14

(20)

4.0	QC8	SECOND CHECK
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**Comment:** SECOND CHECK

09/05/15 (20)

5.0	POWDER COATING	POWDER COATING
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**Comment:** POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

Mask Inside Bore for Priming

START TIME:

9:300

UN42

09/05/19

(120)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 30/04/2009 9:07:16 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 02.750 SUPPORT

Job Number: 47637

Part Number: D28931

Job Number:



Seq. #:

Machine Or Operation:

Description :

OVEN TEMPERATURE: 400°

FINISH TIME: 9:30

MD

09/05/19

6.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



HI



Comment: INSPECT POWDER COAT

09-05-19

(x20)

7.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

Prime inside surface as per Dwg D2893 and QSI 005 4.3.

RT 09-06-03

8.0

QC14

INSPECT SPRAY PAINT



09-06-03 (20)



Comment: INSPECT SPRAY PAINT

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: X Tube Assy

RT 09-06-03

(x20)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



09/06/04 MF

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF
09-06-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



NOTE: Date & initial all entries


DART AEROSPACE LTD		Work Order: 47637
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.998	2.998	2.989	2.989	2.988
AB	0.440	0.460		0.440	0.440	0.440	0.440	0.440
AC	0.125	0.160		0.155	0.140	0.131	0.131	0.128
AD	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AE	0.188	0.193		0.191	0.191	0.191	0.191	0.191
AF	0.125	0.160		0.140	0.140	0.140	0.140	0.140
AG	0.140	0.160		0.140	0.140	0.147	0.149	0.150
AH	1.360	1.400		1.370	1.393	1.366	1.371	1.367
AI	0.040	0.060		0.052	0.052	0.050	0.050	0.049
AJ	1.190	1.230		1.211	1.213	1.210	1.2155	1.2115
AK	0.010	0.020		0.010	0.010	0.010	0.010	0.010
AL	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AM	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AN	2.518	2.538		2.538	2.538	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		0.262	0.262	0.262	0.262	0.262
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR								
AS								
AT								
Accept/Reject								

Measured by: 	Date: 09/05/14
Audited by: 	Date: 09/05/19
Prototype Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 47637
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	6	7	8	9	10
HAAS Section								
AA	2.985	3.005		2.988	2.987	2.987	2.988	2.987
AB	0.440	0.460		0.440	0.440	0.440	0.440	0.440
AC	0.125	0.160		0.130	0.130	0.132	0.130	0.130
AD	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AE	0.188	0.193		0.191	0.191	0.1915	0.1915	0.1915
AF	0.125	0.160		0.140	0.140	0.140	0.140	0.140
AG	0.140	0.160		0.151	0.150	0.148	0.150	0.149
AH	1.360	1.400		1.3685	1.3695	1.368	1.368	1.367
AI	0.040	0.060		0.0515	0.049	0.049	0.049	0.049
AJ	1.190	1.230		1.214	1.214	1.214	1.212	1.212
AK	0.010	0.020		0.010	0.010	0.010	0.010	0.010
AL	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AM	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AN	2.518	2.538		2.530	2.530	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		0.262	0.262	0.262	0.262	0.262
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR								
AS								
AT								
Accept/Reject								

Measured by: DJT Date: 09/05/14

Audited by: BP Date: 09/05/14

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	47637
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893		Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	15
HAAS Section								
AA	2.985	3.005		2.987	2.988	2.992	2.989	2.989
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.144	.141	.134	.133	.138
AD	0.040	0.060		.047	.047	.047	.056	.045
AE	0.188	0.193		.191	.191	.191	.191	.191
AF	0.125	0.160		.148	.146	.147	.145	.147
AG	0.140	0.160		.158	.155	.153	.153	.154
AH	1.360	1.400		1.368	1.371	1.370	1.379	1.375
AI	0.040	0.060		.057	.054	.050	.048	.051
AJ	1.190	1.230		1.213	1.218	1.225	1.224	1.224
AK	0.010	0.020		.010	.010	.010	.010	.010
AL	0.053	0.073		.0625	.0625	.0625	.0625	.0625
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.530	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.0625	.0625	.0625	.0625	.0625
AR								
AS								
AT								
Accept/Reject								

Measured by: 09/05/16 Date: 09/05/16

Audited by: 09/05/19 Date:

Prototype Approval: Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

DART AEROSPACE LTD		Work Order: 47637
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article
 ☐ Prototype

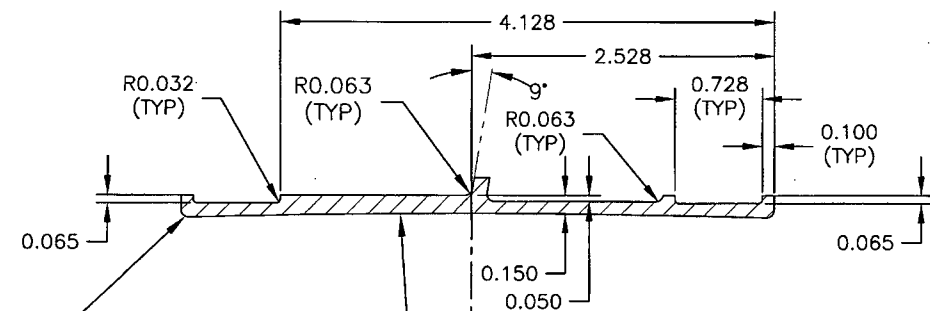
				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	20
HAAS Section								
AA	2.985	3.005		2.987	2.987	2.985	2.987	2.987
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.133	.138	.136	.130	.130
AD	0.040	0.060		.047	.053	.053	.049	.048
AE	0.188	0.193		.191	.191	.191	.191	.191
AF	0.125	0.160		.149	.147	.148	.145	.146
AG	0.140	0.160		.154	.154	.154	.157	.159
AH	1.360	1.400		1.371	1.372	1.371	1.370	1.369
AI	0.040	0.060		.049	.050	.058	.050	.050
AJ	1.190	1.230		1.219	1.220	1.219	1.217	1.217
AK	0.010	0.020		.010	.010	.010	.010	.010
AL	0.053	0.073		.0625	.0625	.0625	.0625	.0625
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.524	2.524	2.524	2.524	2.524
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.263	.262	.262	.262	.262
AQ	0.053	0.073		.0625	.0625	.0625	.0625	.0625
AR								
AS								
AT								
Accept/Reject								

Measured by: *[Signature]*
Date: 09/05/17

Audited by: *[Signature]*
Date: 09/05/17

Prototype Approval: _____
 Date: _____

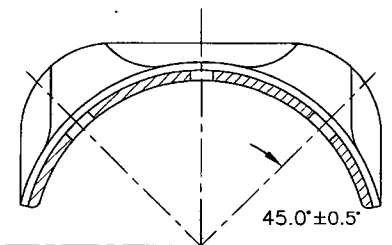
Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM <i>[Signature]</i>	<i>[Signature]</i>



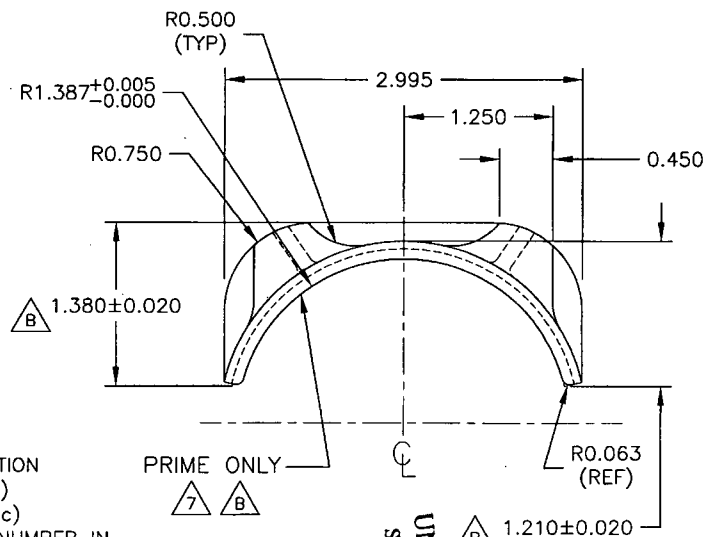
SECTION B-B

R0.063
(TYP ALL AROUND
INSIDE EDGE) R87.39±3
(THIS EDGE ONLY)

TO
CENTER



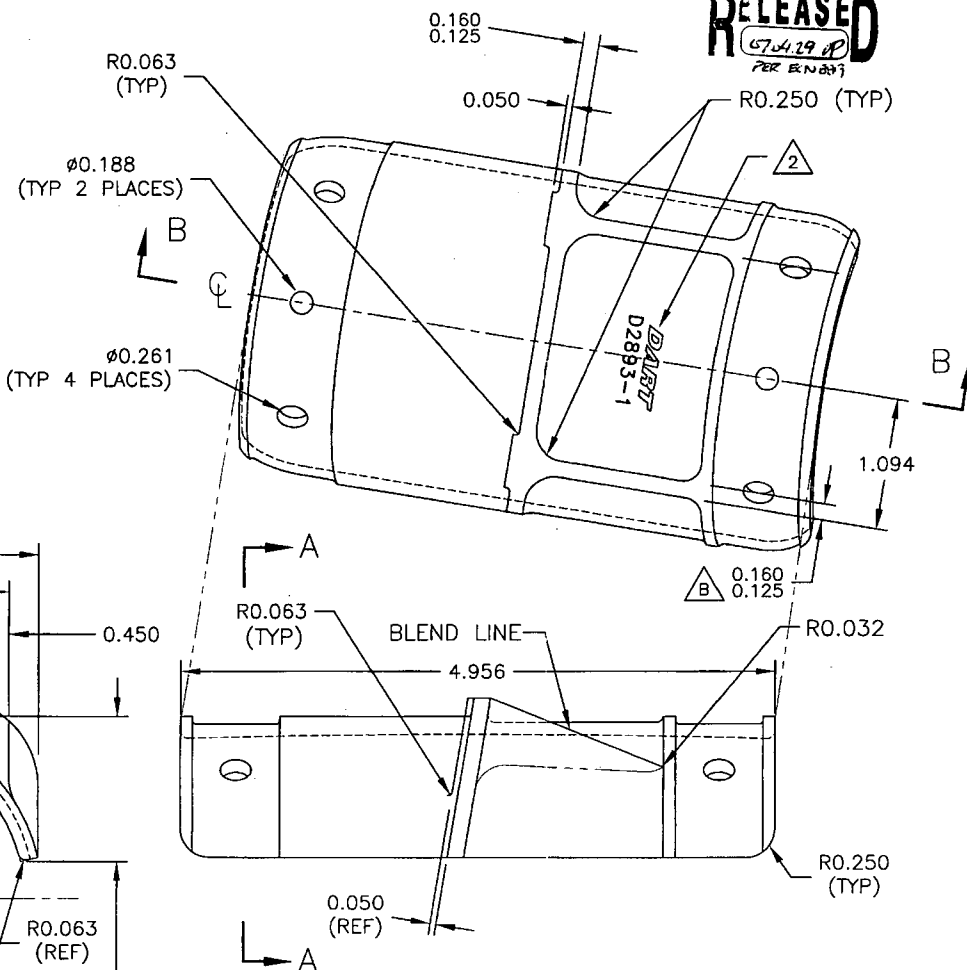
SECTION A-A
TOOLING HOLE DETAIL



PRIME ONLY

7 B

B 1.210±0.020



RELEASED
(57.04.19.0)
PER ENR 203

D2893-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL
HEAT TREAT TO H900 CONDITION
(900°F FOR 1 HR, AIR COOL)
MIN UTS = 170 KSI (38 HRc)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN
THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005

NO WORK
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RETURN TO
SHOP COPY

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PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

B	07.03.16	UPDATE DIMS AS MFG., PRIME INSIDE
A	01.01.10	NEW ISSUE
DESIGN	90	DRAWN BY P.H.
CHECKED	✓	APPROVED ✓
DATE	07.03.16	TITLE 02.750 SUPPORT
DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA		REV. B SHEET 1 OF 1 SCALE 1:1